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## CRYSTAL D. ROGERS, PHD

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University of California Davis, School of Veterinary Medicine

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### I. APPOINTMENTS

- JULY 2023- **Associate Professor, Department of Anatomy, Physiology, and Cell Biology**  
University of California, Davis, School of Veterinary Medicine.
- SEPT 2019- JUNE 2023 **Assistant Professor, Department of Anatomy, Physiology, and Cell Biology**  
University of California, Davis, School of Veterinary Medicine.
- JAN 2016- AUG 2019 **Assistant Professor, Department of Biology**  
California State University, Northridge, CA, Department of Biology.

### II. EDUCATION/RESEARCH EXPERIENCE

- 2010- 2015 **Postdoctoral Scholar** with Dr. Marianne Bronner, California Institute of Technology, Pasadena, CA
- 2003-2009 **Ph.D. in Developmental and Molecular Biology** with Dr. Elena Silva, Georgetown University, Washington, D.C., Honors: Dissertation defended with distinction.
- 1997-2001 **B.S. in Organismal Biology, Ecology and Evolution**, UCLA, Los Angeles

### III. PUBLICATIONS

#### PEER-REVIEWED RESEARCH PUBLICATIONS (\*CO-FIRST AUTHOR, <sup>U</sup>UNDERGRADUATE, <sup>A</sup>CORRESPONDING AUTHOR)

1. Marshall, E.J., Ramarapu, R., **Rogers, C.D.** <sup>A</sup> NSAID-mediated cyclooxygenase inhibition disrupts ectodermal derivative formation in axolotl embryos. *Under review*, Differentiation. Oct 2024.
2. Preprint: <https://www.biorxiv.org/content/10.1101/2024.10.30.621122v1>
3. Leathers, T.A., Ramarapu, R., **Rogers, C.D.** <sup>A</sup> Spatiotemporal Characterization of Cyclooxygenase Pathway Enzymes During Vertebrate Embryonic Development. *In revision*, Dev. Biol. Oct 2024. Preprint: <https://www.biorxiv.org/content/10.1101/2024.08.02.606390v1>
4. Echeverria, C.V.\*., Jr., Leathers, T.A.\*., **Rogers, C.D.** <sup>A</sup> Comparative Analysis of Fixation Techniques for Signal Detection in Avian Embryos. Dev. Biol., *Epub ahead of print*. Sept. 2024.
5. Leathers, T.A. and **Rogers, C.D.** <sup>A</sup>, Non-steroidal anti-inflammatory drugs and implications for the cyclooxygenase pathway in embryonic development. American Journal of Physiology-Cell Physiology. January 2023.
6. Keith C Cheng, Rebecca D Burdine, Mary E Dickinson, Stephen Ekker, Alex Y Lin, K. C. Kent Lloyd, Cathleen M Lutz, Calum A MacRae, John H Morrison, David O'Connor, John H Postlethwait, **Crystal D Rogers**, Susan Sanchez, Julie H Simpson, William S Talbot, Douglas C Wallace, Jill M Weimer, and Hugo J Bellen. *Promoting validation and cross-phylogenetic integration in model organism research*. Disease Models & Mechanisms. 2022.
7. Leathers, T.A. and **Rogers, C.D.** <sup>A</sup>, *Time to go: neural crest epithelial-to-mesenchymal transition*. Development. July 2022.
8. Adamson, C.J., Morrison-Welch, N., **Rogers, C.D.** <sup>A</sup>, *The amazing and anomalous axolotls as scientific models*. Dev. Dyn. March 2022.
9. Monroy, B.Y., Adamson, C.J.<sup>U</sup>, Camacho-Avila, A., Guerzon<sup>U</sup>, C.N., Echeverria Jr., C.V., **Rogers, C.D.** <sup>A</sup>, *Expression Atlas of avian neural crest proteins: Neurulation to Migration*. Dev. Biol. 2022.
10. Manohar, S., Camacho-Magallanes, A., Echeverria, C., **Rogers, C.D.** <sup>A</sup>, *Cadherin-11 is required for neural crest specification and survival*. Front. Physiol., Oct. 2020, Article 562272.
11. Chacon, J.<sup>U</sup>, **Rogers, C.D.** <sup>A</sup>, *Early expression of Tubulin Beta-III in avian cranial neural crest cells*. Gene Expression Patterns, 34, 2019.
12. **Rogers, C.D.** <sup>A</sup>, *Data on the effects of N-cadherin perturbation on the expression of type II cadherin proteins and major signaling pathways*. Data Brief 20, 2018, p. 419-425.
13. **Rogers, C.D.** <sup>A</sup>, Sorrells-Smith, L.K., Bronner, ME, *A catenin-dependent balance between N-cadherin and E-cadherin controls neuroectodermal cell fate choices*. Mech Dev 152, 2018, p. 44-56, 2018.
14. **Rogers, C.D.** <sup>A</sup>, Nie, S.Y., *Specifying neural crest cells: from chromatin to morphogens and factors in between*. Wiley Interdisciplinary Reviews (WIREs), e322, 2018. **Article chosen for cover image.**
15. **Rogers, C.D.**, A. Saxena, and M.E. Bronner<sup>A</sup>, *Sip1 mediates an E-cadherin-to-N-cadherin switch during cranial neural crest EMT*. J Cell Biol, 2013. **203**(5): p. 835-47. **Article chosen for cover image.**

16. **Rogers, C.D.**, J.L. Phillips<sup>U</sup>, and M.E. Bronner<sup>A</sup>, *Elk3 is essential for the progression from progenitor to definitive neural crest cell*. *Dev Biol*, 2013. **374**(2): p. 255-63.
17. **Rogers, C.D.**, Jayasena, C.S., Nie, S., Bronner<sup>A</sup>, M.E., *Neural crest specification: tissues, signals, and transcription factors*. Wiley Interdisciplinary Reviews: Developmental Biology, 2012. **1**(1): p. 52-68.
18. **Rogers, C.D.**, G.S. Ferzli<sup>U</sup>, and E.S. Casey<sup>A</sup>, *The response of early neural genes to FGF signaling or inhibition of BMP indicate the absence of a conserved neural induction module*. *BMC Dev Biol*, 2011. **11**: p. 74.
19. **Rogers, C.D.**, S.A. Moody, and E.S. Casey<sup>A</sup>, *Neural induction and factors that stabilize a neural fate*. *Birth Defects Res C Embryo Today*, 2009. **87**(3): p. 249-62. Review article..
20. **Rogers, C.D.\***, Harafuji\*, N., Archer, T.C., Cunningham, D.D., T.C., Casey, E.M. <sup>A</sup>, et al., *Xenopus Sox3 activates sox2 and geminin and indirectly represses Xvent2 expression to induce neural progenitor formation at the expense of non-neural ectodermal derivatives*. *Mech Dev*, 2009. **126**(1-2): p. 42-55.
21. **Rogers, C.D.\***, Archer, T.C.\* , Cunningham, D.D., Grammer, T.C., Casey, E.M. <sup>A</sup>, *Sox3 expression is maintained by FGF signaling and restricted to the neural plate by Vent proteins in the Xenopus embryo*. *Dev Biol*, 2007. **313**(1): p. 3071.

#### PEER-REVIEWED PERSPECTIVE PUBLICATIONS (<sup>A</sup>CORRESPONDING AUTHOR)

1. Debra Murray, Clintoria R. Williams, Jennifer A. Gaddy, **Crystal D. Rogers**, Annet Kirabo, Monica Santiseban, Celestine N. Wanjalla, Edith M. Williams, Antentor Hinton Jr. *The Power of Junior Faculty Mentoring Committees*. 2024. *Journal of Cellular Physiology*. July 2024.
2. **Crystal D. Rogers**, Annet Kirabo, Melanie McReynolds, Mariya T. Sweetwyne, Celestine Wanjalla, Jazmine Benjamin, Edith M. Williams, Jennifer A. Gaddy, Clintoria R. Williams, Antentor Hinton, Jr. *The Graduate School Guide: How to Prepare for the Qualifying Exam and Assemble a Thesis/Graduate Committee*. 2024. *Journal of Cellular Physiology*. April 2024.
3. **Crystal D. Rogers<sup>A</sup>**, Chris Amemiya, Swathi Arur, Leslie Babonis, Michael Barresi, Madelaine Bartlett, Richard Behringer, Blair Benham-Pyle, Dominique Bergmann, Ben Blackman, C. Titus Brown, Bill Browne, Jasmin Camacho, Yves Chabu Chiswili, Ida Chow, Ondine Cleaver, Jonah Cool, Megan Y. Dennis, Alexandra Jazz Dickinson, Stefano Di Talia, Margaret Frank, Stewart Gillmor, Eric S. Haag, Iswar Hariharan, Richard Harland, Aman Husbands, Loydie Jerome-Majewska, Kristen Koenig, Carole Labonne, Michael Layden, Chris Lowe, Madhav Mani, Megan Martik, Katelyn McKown, Cecilia Moens, Christian Mosimann, Joyce Onyenedum, Robert Reed, Ajna Rivera, Dan Rokhsar, Loic Royer, Flora Rutaganira, Rachel Shahan, Neelima Sinha, Billie Swalla, Jaimie M. Van Norman, Daniel E. Wagner, Athula Wikramanayake, Sophia Zebell, and Siobhán M. Brady<sup>A</sup>. 2024. *Pluripotency of a founding field: rebranding developmental biology*. *Development*. January 2024
4. **Crystal D. Rogers**. 2023. *Cell*. *How do DEI initiatives impact STEMM, and why do we still need them?*
5. Loydie A. Jerome-Majewska , **Crystal D. Rogers**, Rosa A. Uribe. *Editorial from the new Editors-in-Chief of Differentiation*. *Differentiation*. 2022.

#### BOOK CHAPTERS

1. J. Patrick Johnson and **Crystal D. Rogers**. 2004. Thoracoscopic Discectomy. In *Endoscopic Spine Surgery and Instrumentation*. (ed. Kim/Fessler/Regan), p. 111. Thieme Publishers, New York.

#### IV. HONORS AND AWARDS

- |           |  |
|-----------|--|
| 2024      | Elected to Society for Developmental Biology (SDB) Academy   |
| 2024      | JEDI Alumni Award, Life Sciences Editors Foundation  |
| 2023      | UC Davis Chancellor's Fellow for Diversity, Equity and Inclusion   |
| 2022      | Burroughs-Wellcome Guest Speaker, Eastern Carolina University  |
| 2022      | Marine Biological Laboratory Embryology Course: Nancy S. Rafferty Lectureship in Embryology  |
| 2021      | Biochemistry, Molecular, Cellular and Developmental Biology (BMCDB) Graduate Group 1 <sup>st</sup> Year Teaching Award   |
| 2020-2023 | Scialog Fellow: Advancing Bioimaging, Research Corporation for Science Advancement funded by Chan Zuckerberg Initiative  |
| 2019      | Featured on NIGMS Biomedical Beat Blog ( <a href="https://biobeat.nigms.nih.gov/2019/10/cool-images-a-colorful-and-halloween-inspired-collection/">https://biobeat.nigms.nih.gov/2019/10/cool-images-a-colorful-and-halloween-inspired-collection/</a> ) |
| 2019      | Trainer in the Molecular and Cellular Biology Training Program (T32 GM00737741)  |

2019 Member, Pharmacology and Toxicology (PTX) Graduate Group UC Davis  
 2019 Member, Biochemistry, Molecular, Cellular and Developmental Biology (BMCDB) Graduate Group UC Davis  
 2019 Faculty Scholar of the Center for the Advancement of Multicultural Perspectives on Science (CAMPOS), UC Davis  
 2019 NIH Director's Blog Highlighted Image (<https://directorsblog.nih.gov/2019/02/21/students-contribute-to-research-through-ovarian-art/>)  
 2019 CSU Annual Biotechnology Conference academic year 2018-2019 featured image.  
 2018 Winner of the Federation of American Societies for Experimental Biology BioArt competition  
 2018-2020 Elected to Society of Development (SDB) Board of Directors as Primarily Undergraduate Institution Representative  
 2017-2019, 2022-2024 Mentor, Choose Development! (SDB)  
 2017-2019 Co-mentor, CSUN Chapter Society for Advancement of Chicano and Native American Students (SACNAS)  
 2016-2019 NIH Loan Repayment Program (LRP) Ambassador  
 2015 Best postdoctoral poster ASCB/MAC poster competition  
 2008 Yale Bouchet Conference on Diversity in Graduate Education: Best Oral Presentation  
 2007 Most Outstanding Graduate Student in the Department of Biology

## V. GRANTS AND FELLOWSHIPS

### *Current:*

2023-2024 Metadevices for longitudinal imaging of mitochondrial trafficking in peripheral nerves. (PAIR-Up/ASCB), Abdoulaye Ndao (PI), Sam Lewis (Co-PI) Crystal Rogers (Co-PI), Feather Ives (Co-PI), Timothy Oladunni (Co-PI). (**Awarded**)  
 2023-2024 Conference: Envisioning Developmental Biology For the Future (NSF IOS-2310253), Siobhan Brady, PI, Crystal Rogers, Co-PI. (**Awarded**)  
 2022-2023 2022 SCIALOG: ADVANCING BIOIMAGING (ABI) Award: MRI with molecular specificity for a new realm of neurodevelopmental research (**Awarded**)  
 2022-2024 NIH NIDCR R03: Mechanisms of microtubule-mediated cranial neural crest EMT and differentiation, R03 DE032047-01 (**Awarded**)  
 2022-2026 NSF CAREER: Functional Analysis of Crest EffectorS (FACES), (2143217) (**Awarded**)  
 2019 UC Davis School of Veterinary Medicine New Faculty Startup Funds  
 2019 UC Davis Academic Enrichment Funds from CAMPOS

### *Past:*

2021-2023 UC Davis Intellectual and Developmental Disabilities Research Center (IDDRC) Pilot Grant, "Defining early relationships between transcription factors and cell adhesion in central nervous system development" (Awarded)  
 2020-2022 UC Davis Environmental Health Sciences Center Pilot Grant, "Identifying the effects of nitrate exposure on embryonic development" (Awarded).  
 2019-2020 NIH Loan Repayment Program recipient, awarded by the National Institute of Dental and Craniofacial Research (NIDCR) (Awarded).  
 2019 CSUN Research, Scholarship, and Creative Activity (RSCA) Award. "Dissecting the neural crest gene regulatory network" (Awarded)  
 2017, 2019 CSU Annual Biotechnology Conference Travel Award to attend Neural Crest GRC. (Awarded)  
 2015, 2016, 2018 ASCB Mac Travel Award to attend the American Society for Cell Biology meeting. (Awarded)  
 2018 CSUN Research and Graduate Studies Summer Grant "Identifying the role of BTBD7 in neural crest cell development". (Awarded)  
 2017-2020 NIH R15 HD092170-01 "Cadherin interactions in ectodermal derivative fate specification". (Awarded)  
 2017-2018 Choose Development (SDB) Stipend to fund undergraduate student.  
 2016-2018 CSUN New Faculty Start-up Funds.  
 2016 ASCB MAC Junior Faculty and Postdoc Career Development Workshop Travel Fellowship. (Awarded)

- 2014- 2018 NIH Loan Repayment Program recipient, awarded by the National Institute of Dental and Craniofacial Research (NIDCR). (Awarded)
- 2014- 2016 California Institute of Technology Baxter Fellowship (Awarded)
- 2013, 2015 Carl Storm Underrepresented Minority Fellowship to attend Neural crest and cranial placode GRC (Awarded)
- 2010-2013 NIH Diversity Supplement on R01 to E. Davidson and M.E. Bronner awarded by the National Institute of Child Health and Development (NICHD).
- 2005-2015 Travel award through FASEB MARC to attend National/Regional SDB Meeting

## VI. SELECTED INVITED TALKS

- 2024 University of Virginia 2024 Brain Symposium, Charlottesville, VA. (May)
- 2024 UC Davis CAMPOS Colloquium. Virtual (May)
- 2024 California State University Stanislaus, Turlock, CA (May)
- 2024 University of Kentucky, Lexington, KY. (April)
- 2024 University of Georgia, Athens, GA. (March)
- 2024 University of Texas, Arlington, TX. (February)
- 2023 Gene Regulatory Network Course, Woods Hole, MA (October)
- 2023 West Coast Society for Developmental Biology Meeting, San Luis Obispo, CA (August)
- 2023 Bioimaging North America Speaker Series, Virtual (August)
- 2023 Marine Biological Laboratory Embryology Course, Woods Hole, MA (July)
- 2023 Gordon Research Conference, Cell Contact and Adhesion, Colby-Sawyer College, NH (June)
- 2023 FaceBase Community Forum, Los Angeles, CA (June)
- 2023 San Francisco State University, San Francisco, CA (May)
- 2023 Columbia University, New York, NY. (May)
- 2023 CUNY Queens College, Virtual. (April)
- 2023 University of Oregon, Eugene, OR. (April)
- 2023 Allen Institute for Cell Science. Virtual (February)
- 2023 UC Merced, Merced, CA. (February)
- 2023 Western Michigan University. (Virtual) (January)
- 2023 UC Davis MIND Institute Research Seminar Series. Virtual (January)
- 2022 American Society for Cell Biology Annual Conference, Washington, DC. (December)
- 2022 East Carolina University, Greenville, NC. (November)
- 2022 Aquatic Models for Human Disease Conference, Woods Hole, MA (October)
- 2022 UC Davis EHSC Seminar Series, Virtual (September)
- 2022 Society for Developmental Biology Annual Conference, Vancouver Ca. (July)
- 2022 Marine Biological Laboratory Embryology Course, Woods Hole, MA (June)
- 2022 International Society of Stem Cell Research Annual Conference, San Francisco, CA. (June)
- 2022 University of Chicago, Chicago, IL. (May)
- 2022 Yale University, New Haven, CT. (May)
- 2022 University of Washington, Seattle, WA. (April)
- 2022 University of Nevada, Las Vegas, NV. (April)
- 2022 University of Tennessee, Knoxville. Virtual (March)
- 2022 Rice University, Houston, TX. (February)
- 2021 Duke University. Virtual (December)
- 2021 Baylor College of Medicine. Virtual (December)
- 2021 Arcadia Science. Virtual (December)
- 2021 Stanford University. Virtual (November)
- 2021 Cincinnati Children's Hospital Medical Center. Virtual (November)
- 2021 University of Miami. Virtual (November)
- 2021 California State University, Chico. Virtual (September)
- 2021 Marine Biological Laboratory Embryology Course. Virtual (June)
- 2021 Yale University. Virtual (June)
- 2021 McGill University. Virtual (June)
- 2021 University of California, Los Angeles, Molecular Biology Institute Seminar Series. Virtual (May)

- 2021 University of California, Santa Barbara, GSDS Seminar. Virtual (May)
- 2021 UC Davis CAMPOS Colloquium. Virtual (April)
- 2021 University of Louisville. Virtual (April)
- 2021 California State University, East Bay. Virtual (April)
- 2021 Neural Crest Research Colloquium. Virtual (April)
- 2021 University of Colorado, Anschutz Medical Campus. Virtual (April)
- 2021 Brown University. Virtual (March)
- 2021 University of Richmond, Biology Department Seminar Series. Virtual (March)
- 2021 University of Michigan, Variations in Biology Seminar Series. Virtual (February)
- 2021 Reed College, Biology Department Seminar Series. Portland, OR. Virtual (February)
- 2021 Ithaca College Seminar Series. Virtual (February)
- 2020 University of Virginia, Cell Biology Journal Club/Seminar Series. Virtual (December)
- 2020 UMKC Oral & Craniofacial Sciences Seminar Series. Virtual (November)
- 2020 Stony Brook University. Virtual (November)
- 2020 California State University Interdisciplinary Cancer Meeting. Virtual (November)
- 2020 Amherst College, Developmental Biology. Virtual (October)
- 2020 Biochemistry, Molecular, Cellular and Developmental Biology (BMADB) Graduate Group Research Symposium Keynote Speaker. Virtual (September)
- 2020 UC Davis Integrated Biomedical Sciences Seminar Series. UC Davis (March).
- 2020 Smith College Seminar Series. Northampton, MA (February).
- 2019 University of Alabama Integrative Biology Seminar Series. Birmingham (December).
- 2019 UC Davis MCB Training Grant Retreat Short Talk. South Lake Tahoe, CA (October).
- 2019 UC Davis BMADB Journal Club Research Presentation. Davis, CA (October).
- 2019 Gordon Research Conference on Neural Crest and Cranial Placodes: Poster Preview. Barga, Italy (March).
- 2019 SDB West Coast Regional Meeting. Cambria, CA (March).
- 2019 UC Davis School of Veterinary Medicine. Davis, CA (March).
- 2019 NICHD Developmental Biology and Structural Variation Branch Trainee Workshop. Bethesda, MD. (March).
- 2018 American Society of Cell Biology Annual Meeting, San Diego, CA (December).
- 2018 California State University Interdisciplinary Cancer Meeting (CSU-ICM), Northridge, CA (November).
- 2017 University of California, Riverside, Department of Biology Seminar Series. Riverside, CA (November).
- 2016 Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Annual Meeting. Long Beach, CA (October).
- 2015 SDB National Meeting. Snowbird, UT.
- 2015 SDB West Coast Regional Meeting. Yosemite, CA.
- 2015 California State University, Northridge (CSUN). Northridge, CA.
- 2013 SDB West Coast Regional Meeting. Cambria, CA.

## VII. RESEARCH POSTER PRESENTATIONS

- 2019 Gordon Research Conference on Neural Crest and Cranial Placodes, Barga, Italy (April).  
Manohar, S., Camacho, A., **Rogers, CD**.
- 2017 Gordon Research Conference on Neural Crest and Cranial Placodes, Ventura, CA (February).  
**Rogers, CD**, Sorrells, L\*, Bronner, ME.
- 2016 National Meeting of the American Society for Cell Biology, San Francisco, CA (December).  
**Rogers, CD**, Sorrells-Smith, L, Bronner, ME.
- 2016 Santa Cruz Developmental Biology Meeting, Santa Cruz, CA (August). **Rogers, CD**, Bronner, ME.
- 2015 American Society for Cell Biology (ASCB), San Diego, CA (Dec.). **Rogers, CD**, Wie, S, Bronner, ME.
- 2015 Gordon Research Conference: Neural Crest & Cranial Placodes, Waltham, MA (July). **Rogers, CD**, Wie, S, Bronner ME.

- 2014 Southwest Regional Meeting for Society for Developmental Biology, Denver, CO (March). **Rogers, CD**, Phillips, JL, Bronner, ME.
- 2013 American Society for Cell Biology Annual Meeting. New Orleans, LA (December). **Rogers, CD**, Saxena, A, Bronner, ME.
- 2013 Gordon Research Conference: Neural Crest & Cranial Placodes, Easton, MA (July). **Rogers, CD**, Saxena, A, Bronner, ME.

**SELECTED STUDENT POSTER PRESENTATIONS (Bold indicates presenter, \*indicates undergraduate)**

My students are encouraged to present their research at conferences to gain exposure and experience.

- 2024 National SDB Conference, Atlanta, GA (July). **Herron, H\***, Menendez, H, Rogers, CD.
- 2024 National SDB Conference, Atlanta, GA (July). **Leathers, TL** and Rogers, CD.
- 2024 National SDB Conference, Atlanta, GA (July). **Marshall, EJ**, Kawashima, M.\*, Sandberg, K\*, and Rogers, CD.
- 2024 National SDB Conference, Atlanta, GA (July). **Leathers, TL** and Rogers, CD.
- 2023 National SACNAS Conference, Portland, OR (Oct). **Batista, N.\***, Echeverria, CV, Rogers, CD.
- 2023 National SACNAS Conference, Portland, OR (Oct). **Herron, H\***, Menendez, H, Rogers, CD.
- 2023 National SDB Conference, Chicago, IL (July). **Leathers, TL**, Marshall, EJ, Rogers, CD.
- 2023 National SDB Conference, Chicago, IL (July). **Herron, H\***, Menendez, H, Rogers, CD.
- 2022 American Society of Cell Biology Conference, Washington, DC. **Leathers, TL**, Morrison-Welch, N.\*, Rogers, CD.
- 2022 American Society of Cell Biology Conference, Washington, DC. **Menendez, H.**, Rogers, CD.
- 2022 National Veterinary Scholars Symposium, Minneapolis, MN (July). **Ramarapu, R**, Echeverria, CV, Rogers, CD.
- 2022 National SDB Conference, Vancouver, BC (July). **Leathers, TL**, Morrison-Welch, N., Rogers, CD.
- 2022 UC Davis College of Biological Sciences (CBS) Dean's Circle Undergraduate Research Conference (April). **Kawashima, M.\***, Baumler, C., Rogers, CD.
- 2021 UC Davis Undergraduate Research Conference (April). **Adamson, C.\***, Monroy, B., Rogers, CD.
- 2020 National SDB Conference, Virtual (July). **Morrison-Welch, N.\***, Rogers, CD. (Winner, Best Undergraduate Poster Presentation)
- 2019 Annual Biomedical Research Conference for Minority Students (ABRCMS), Long Beach, CA (November). **Morrison, N.\***, Rogers, CD. (Winner, Poster Award)
- 2019 ABRCMS, Long Beach, CA (November). **Chacon, J.\***, Rogers, CD.
- 2019 ABRCMS, Long Beach, CA (November). **Machulsky, S.\***, Rogers, CD. (Winner, Poster Award)
- 2019 Society for Advancement of Chicano and Native American Students (SACNAS) Annual Conference, Oahu, HI (October). **Morrison, N.\***, Rogers, CD. (Winner, Poster Award)
- 2019 SACNAS Conference, Oahu, HI (October). **Chacon, J.\***, Rogers, CD.
- 2019 SACNAS Conference, Oahu, HI (October). **Machulsky, S.\***, Rogers, CD.
- 2019 National Society for Developmental Biology (SDB) Conference, Boston, MA (July). **Camacho-Avila, A.\***, Rogers, CD.
- 2019 National SDB Conference, Boston, MA (July). **Manohar, S.**, Camacho, A., Rogers, CD.
- 2019 National SDB Conference, Boston, MA (July). **Chacon, J.\***, Rogers, CD.
- 2019 National SDB Conference, Boston, MA (July). **Morrison-Welch, N.\***, Rogers, CD.
- 2019 West Coast SDB Conference, **Morrison-Welch, N.\***, Rogers, CD.
- 2019 West Coast SDB Conference, **Chacon, J.\***, Camacho, A., Rogers, CD.
- 2019 CSU Annual Biotechnology Conference (CSUPERB), Anaheim, CA (January). **Sugumar, M.\***, **Alfaro, J.\***, Rogers, CD.
- 2019 CSUPERB, Anaheim, CA (January). **Camacho-Avila, A.\***, Rogers, CD.

- 2019 CSUPERB, Anaheim, CA (January). **Manohar, S.\***, Camacho, A., Rogers, CD.
- 2018 American Society for Cell Biology (ASCB), San Diego, CA (November). **Manohar, S.\***, Camacho, A., Rogers, CD.
- 2018 California State University Interdisciplinary Cancer Meeting (CSU-ICM), Northridge, CA (November). **Manohar, S.\***, Camacho, A., Rogers, CD.
- 2018 SACNAS Conference, San Antonio, TX (October). **Sorrells, L.**, Rogers, CD.
- 2018 National SDB Conference, Portland, OR (July). **Sorrells, L.\***, Rogers, CD.
- 2018 National SDB Conference, Portland, OR (July). **Echeverria, C.\***, Harding, B., Rogers, CD.
- 2018 National SDB Conference, Portland, OR (July). **Camacho-Avila, A.\***, Rogers, CD.
- 2018 CSUPERB, Santa Clara, CA (January). Camacho, A., **Manohar, S.\***, Rogers, CD.
- 2017 SACNAS, Salt Lake City, UT (October). **Camacho-Avila, A.\***, Rogers, CD.
- 2017 SACNAS, Salt Lake City, UT (October). **Echeverria, C.\***, Harding, B, Rogers, CD.
- 2017 SACNAS, Salt Lake City, UT (October). **Javidan, A.\***, **Hyde-Bozer, D.\***, Rogers, CD.
- 2017 National SDB Conference, Minneapolis, MN (July). Camacho, A., **Manohar, S.\***, Rogers, CD.
- 2017 National SDB Conference, Minneapolis, MN (July). **Camacho-Avila, A.\***, Rogers, CD.
- 2017 National SDB Conference, Minneapolis, MN (July). **Echeverria, C.\***, Rogers, CD.
- 2017 National SDB Conference, Minneapolis, MN (July). **Javidan, A.**, Hyde-Bozer, D.\* , Rogers, CD.
- 2017 West Coast SDB, Fish Camp, CA (March). **Sorrells, L.\***, Rogers, CD.
- 2017 West Coast SDB, Fish Camp, CA (March). **Camacho, A.\***, **Manohar, S.\***, Rogers, CD.

### VIII. TEACHING EXPERIENCE

- Professor at UC Davis.** Integrative Pathobiology Core 1 (PMI 201) (Winter 2024)
- Professor at UC Davis.** Comparative Vertebrate Organology (APC100/NPB123) (Fall 2022, 2023)
- Professor at UC Davis.** Developmental Neurobiology (NSC226) (Winter 2021, Fall 2021- 2023)
- Professor at UC Davis.** Veterinary Medicine Basic Foundations (VET401)(Fall 2020-2023)
- Professor at UC Davis.** Veterinary Medicine Professional and Clinical Skills (VET400)(Fall 2020)
- Professor at UC Davis.** Developmental Biology (BCB213)(Winter 2020- 2024)
- Professor at UC Davis.** Advanced Biochemistry Laboratory Rotations (BCB220L) (Winter 2020-2024)
- Professor at UC Davis.** Musculoskeletal (VET403)(Spring 2020- 2024)

#### CALIFORNIA STATE UNIVERSITY NORTHRIDGE

- Professor at CSUN.** Embryology lecture and lab (BIOL 441/L) (Fall 2016- 2018)
- Professor at CSUN.** Introductory biology (BIOL 107) (Spring 2016- 2018)
- Professor at CSUN.** Cell biology seminar (BIOL 655B) (Spring 2016)
- Professor at CSUN.** Graduate proseminar (BIOL 691) (Spring 2017)
- \*COURSES DESIGNED OR RE-DESIGNED:** Vertebrate Embryology (Biol 441/L), Cell Migration in Development and Cancer (Biol 655B)

#### CALIFORNIA INSTITUTE OF TECHNOLOGY (POSTDOCTORAL TRAINING)

- Mentor** for Summer Undergraduate Research Fellowship (SURF) and Minority Undergraduate Research Fellowship (MURF) programs at California Institute of Technology (2010-2015).
- Lecturer at Caltech.** Team-taught Developmental Biology Course (Bi 117) (2014).

#### GEORGETOWN UNIVERSITY (GRADUATE TRAINING)

- Senior Thesis Mentor.** I guided the projects of four Georgetown undergraduates (2006-2009)
- Graduate Teaching Fellow.** Advanced Development Course. Georgetown University, Washington, DC (2006), Developmental Biology Course (2005), Introductory Biology Courses I & II (2004).

#### CURRENT AND PREVIOUSLY MENTORED TRAINEES

\*indicates URM, woman, or first to college, <sup>u</sup>indicates undergraduate, *post-graduation locations*

#### UC Davis:

##### *Postdoctoral fellows*

- 2020- 2021 Brigette Monroy, PhD\* (Postdoctoral Fellow, NSF PRFB Awardee, *Scientist, Star Therapeutics*)

### *Graduate students*

2023- Present Raneesh Ramarapu (DVM/PhD Student, GGIP Graduate Group, Vision T32 Fellow)  
2023- Present Emma Marshall\* (DVM/PhD Student, MCIP Graduate Group, eMCDB T32 Fellow)  
2023- Present Joanne Mendez\* (Graduate Student, BMCDB Graduate Group)  
2023- Present Julia Godinez\* (Graduate Student, BMCDB Graduate Group)  
2022- Present Camilo Echeverria\* (Graduate Student, BMCDB Graduate Group, NSF GRFP Awardee, 2022)  
2022- Present Heddy Menendez\* (Graduate Student, BMCDB Graduate Group, NSF GRFP Awardee, 2023)  
2021- Present Tess Leathers\* (Graduate student, BMCDB Graduate Group, NSF GRFP Awardee, 2022)

### *Undergraduate and post baccalaureate students*

2024-present Christian Torres Lopez, Mia Meisen<sup>u</sup>, William, Stoehr<sup>u</sup>, Ana Gonzalez<sup>u\*</sup>, Vinay Reddy<sup>u</sup>, Cierra Shelton<sup>u\*</sup>, Kordelia Kokott<sup>u\*</sup>, Aaswhin Makhija<sup>u</sup>, Kathryn Sandberg<sup>u\*</sup>, Rachael Atkins<sup>u\*</sup>  
2023-2024 Hannah Herron<sup>u\*</sup> (FACES Scholar), Nancy Batista<sup>u\*</sup> (FACES Scholar, *City of Hope Graduate School*), Kathryn Sandberg<sup>u\*</sup>, Rachael Atkins<sup>u\*</sup>, Ana Gonzalez<sup>u\*</sup> (*Royal College of Veterinary Medicine*), Vinay Reddy<sup>u</sup>, Cierra Shelton<sup>u\*</sup>, Kordelia Kokott<sup>u\*</sup>, Aaswhin Makhija<sup>u</sup>,  
2023- 2023 Nico Braga<sup>u</sup>  
2022- 2023 Briani Zhang<sup>u\*</sup>, Maxim Kawashima (Junior Specialist, *Anatome, Inc.*), Johnny Vertiz (PREP Scholar, *UC Irvine Graduate School*), Hannah Herron<sup>u\*</sup> (FACES Scholar), Jessica Pacheco<sup>u\*</sup> (FACES Scholar, *UCSF Graduate School*)  
2021- 2022 Stephanie Jiminez<sup>u\*</sup> (Undergraduate, *UCLA Graduate School*), Maxim Kawashima<sup>u</sup>, Siri Nalluri<sup>u</sup>  
2020- 2022 Carly Adamson<sup>u\*</sup> (Undergraduate, UC Davis Junior Specialist, *Baylor College of Medicine Graduate School*)  
2020- 2021 Connor Christensen, BS (Junior Specialist, *UC Riverside Graduate School*)  
2020- 2021 Christian Guerzon<sup>\*u</sup> (Undergraduate, *San Francisco State University Mater's Program, UC Davis School of Veterinary Medicine*)  
2019- 2021 Camilo Echeverria, BS\* (Junior Specialist, *UC Davis Graduate School*)

### CSUN:

#### *Graduate students*

2017-2019 Alexis Avila, MS<sup>\*u</sup> (CSUN Master's Program awarded May 2021, *Kite Pharmaceuticals*)  
2018-2020 Subrajaa Manohar, MS<sup>\*u</sup> (CSUN Master's awarded August, 2020, *Quality Specialist, Thermo Fisher*)  
2016-2018 Lisa Sorrells, MS\* (CSUN Master's awarded August, 2019, *Icon Strategic Solutions Clinical Trials Specialist*)

#### *Undergraduate and post baccalaureate students*

2019-2019 Ashley Perez<sup>\*u</sup>, Malavika Sugumar<sup>u</sup> (*Georgetown University Graduate School*), Jocelyn Alfaro<sup>\*u</sup>  
2018-2021 Nikolas Morrison-Welch<sup>\*u</sup> (*UNC Graduate School*)  
2018-2020 Sasha Machulsky<sup>\*u</sup>  
2018-2019 Jose Chacon<sup>\*u</sup> (*UC San Diego Graduate School*)  
2018-2019 Mary Grace Pilapil<sup>\*u</sup> (*Research technician, Dr. Jacob Fleischmann Lab*), Daisy Nicolas<sup>\*u</sup>  
2017-2018 Diana Ramirez<sup>\*u</sup>, Kushala Yedatore<sup>\*u</sup>  
2016-2018 Camilo Echeverria<sup>\*u</sup> (*NIH IRTA Post bac, UC Davis Graduate School*)  
2016-2019 Alexis Avila, MS<sup>\*u</sup> (*CSUN Master's Program*)  
2016-2018 Subrajaa Manohar, MS<sup>\*u</sup> (*CSUN Master's Program*)  
2016-2017 Lisa Sorrells Smith, MS\* (*CSUN Master's Program*)  
2016-2018 Brandon Harding<sup>\*u</sup> (*UC Davis Master's in Nursing Program*), Aria Javidan, MPH (*George Washington School of Public Health, MPH awarded, May 2020*), Natalie Hyde<sup>u</sup>  
2016-2017 Alberto Camacho<sup>\*u</sup> (*University of Ottawa Graduate School*), Kate Perera<sup>\*u</sup>

### Caltech

#### *Undergraduate students*

2010-2014 Jacquelyn Phillips, MD<sup>\*u</sup> (*UC Irvine Medical School, UCSF Surgical Fellow*)



2013 Karla Terrazas, PhD\*<sup>u</sup> (*Stowers Institute Graduate School*)  
2011 Ryan Morrie, PhD\*<sup>u</sup> (*UC Berkeley Graduate School, UCSF Postdoctoral Fellow*)  
2010 Renee McDonald-Fleming, MD\*<sup>u</sup> (*SUNY Downstate College of Medicine*)

### Georgetown

#### *Undergraduate students*

2006-2009 George Ferzli, MD<sup>u</sup> (*SUNY Downstate Medical School*), Christian Larsen, MD<sup>u</sup> (*University of Maryland Medical School*)  
2005-2008 Elizabeth Yogiaveetil, MD\*<sup>u</sup> (*Georgetown University Medical School*)  
2004-2008 Edward Fenlon, MD<sup>u</sup> (*Georgetown University Medical School*)

## **IX. OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS**

### PROFESSIONAL MEMBERSHIPS

2021- Present International Society for Differentiation (ISD)  
2020- 2023 International Society for Stem Cell Research (ISSCR)  
2019- 2020 American Association for the Advancement of Science (AAAS)  
2019- 2023 Society for Birth Defects Research  
2019- 2022 Society for Integrative and Comparative Biology  
2016- Present Society for Advancement of Chicano and Native American Students (SACNAS)  
2013- Present American Society for Cell Biology (ASCB)  
2006- Present Society for Developmental Biology (SDB), Board of Directors (2018-2020), Inclusion and Outreach Committee (2021-2023), Chair, Inclusion and Outreach Committee (2023-2026)

### OTHER EXPERIENCE

2024 Co-Organizer, Emerging Ideas in Developmental Biology Workshop (Davis, CA), September  
2024 Associate Editor, *Molecular Biology of the Cell*  
2024 Burroughs Wellcome Fund Postdoctoral Diversity Enrichment Program Advisory Committee  
2023 Board of Directors, Life Sciences Editors Foundation (LSEF)  
2023 Co-Organizer, Envisioning the Future of Developmental Biology Workshop (Napa, CA), March  
2022-2024 Co-Editor in Chief, *Differentiation* (Elsevier, ISD)  
2020-2022 Co-Chair: ISSCR 2022 Annual Meeting Tissue Stem Cells and Regeneration Theme  
2020-2021 Co-Organizer, Neural Crest Research Colloquia (Virtual)  
2020-2021 Co-Organizer, SDB Ethel Browne Harvey Postdoctoral Symposium (Virtual)  
2020 Co-Chair: NIH ORIP Session VII. Validation of Non-Zebrafish Aquatic Models for Research  
2020 School of Veterinary Medicine Teaching Academy

### INVITED PARTICIPATION

2024 Invited Speaker, UC Davis Women in STEMM Honors Course  
2024 Panelist, Aggie Resilience Celebration  
2023 Davis Science Café (Davis, CA, November)  
2023 Emcee and panel chair: UC Davis SVM 75<sup>th</sup> Anniversary Kickoff Luncheon  
2022 Panelist: NICHD 60<sup>th</sup> Anniversary Symposium, "Cultivating the next generation of researchers"  
2022 Session Chair: "Defining Stem Cells Across Space and Time," ISSCR (San Francisco, June)  
2022 Poster Judge at the annual meeting for the Society for Developmental Biology  
2020 Session Chair: "Developmental Systems," CSU-ICM Meeting (Virtual, November)  
2020 Poster Judge, SDB Annual Meeting (Virtual, July)  
2016, 2017, 2019 Mentor Poster Judge, SACNAS Annual Meeting (Honolulu, HI; Salt Lake, UT; Long Beach, CA)  
2019 Facilitator, Primarily Undergraduate Institution Networking Session, National SDB, Boston, MA  
2017-2019 Commencement Marshall for CSUN Biology Graduates  
2019 Poster Judge for CSUN Research Symposium Student Presentations  
2019 Organizer, CSU Affinity Network on Cancer Education and Research (CANCER) Doorstep Meeting  
2018 Organizer, Inaugural CSU-Interdisciplinary Cancer Meeting, CSUN  
2018 ASBMB Regional Meeting Oral Presentation Judge

2016-2018 CSUN Student Research Symposium Oral Presentation Judge  
2017 Poster Judge at the annual meeting for the Society for Developmental Biology

#### GRANT PEER REVIEW

2024 Burroughs Wellcome Fund Postdoctoral Diversity Enrichment Program (PDEP) Review  
2024 NIH ZRG1 CDB B81 Special Emphasis Study Section Reviewer  
2022 NIH NCF Remote Study Section, Ad Hoc Reviewer  
2021 National Science Foundation IOS Reviewer  
2019 National Science Foundation GRFP Reviewer  
2019 NIH Remote Study Section, Special Emphasis Panel Ad Hoc Reviewer  
2018 Biotechnology and Biological Sciences Research Council (BBSRC) Grant Peer Reviewer  
2018 NIH Remote Study Section, Special Emphasis Panel Ad Hoc Reviewer  
2017 NIH DEV2 Study Section, Early Career Reviewer

#### OUTREACH AND MEDIA

2024 Somos UC Davis Research Symposium Keynote  
2024 UC Davis College of Biological Science Diversity, Equity and Inclusion Keynote  
2024 Panelist, Aggie Resilience Celebration for Graduate Students from Historically Marginalized Backgrounds, UC Davis  
2024 Participant, ASCB Biology PAIR-UP Advance Imaging Workshop for Black Imaging Scientists  
2023 UC Davis Science Café  
2023 Capital Public Radio Insight with Vicki Gonzalez  
2023 Session Chair: Cell adhesion, polarity and migration. West Coast Society for Developmental Biology Meeting, San Luis Obispo, CA (August)  
2023 Scientific Communication, UC Davis MESA Undergraduate Research Scholars Program  
2023 Symposium Moderator: Emerging Ethical Issues Impacting Developmental Biology Research, Society for Developmental Biology Annual Meeting  
2023 Cell Voices (<https://www.cell.com/cell/libraries/voices>)  
2023 NPR Shortwave Podcast (<https://www.npr.org/2023/02/22/1158848956/what-is-life-for-scientists-asking-is-easier-than-answering>)  
2022 Face To Face with Chancellor May (<https://youtu.be/IZt35CWFJZQ>)  
2022 Viewpoint with Dennis Quaid featuring UC Davis School of Veterinary Medicine  
2022 UC Davis NSF CAREER Award Winners Roundtable  
2022-2023 UC Davis PREP Mentor (Mentee: Johnny Vertiz)  
2022 Principal Investigator/Director Functional Analysis of Crest Effectors (FACES) NSF-funded Summer Research Program  
2022- Partnering to Advance Imaging Research for Underrepresented Minority Scientists Program (PAIR-UP) Leadership Team  
2021 American Society of Cell Biology Panelist: Q&A Panel: Beginning Your Lab  
2021 UC Davis Unfold Podcast' Episode 6: 'Chonk the Axolotl: How Life Is Super Amazing'. [Link](https://www.youtube.com/watch?v=AMeGSJJ2SpY). (November) (<https://www.youtube.com/watch?v=AMeGSJJ2SpY>)  
2021 UC Davis AvenueB Transfer Bridge College of Biological Sciences Faculty *Panelist*  
2021 Participant, Graduate Mentoring Initiative Pilot Program  
2021 Intersections Science Fellows Symposium (ISFS) *Panelist*: Establishing good mentoring relationships with students/postdocs  
2021 UC Davis African Continuum Meet and Greet Faculty *Panelist* (April)  
2021 University of California, Berkeley, JEDI: Ambassadors for Justice, Equity, Diversity & Inclusion in Cell Biology *Panelist*. Virtual (March)  
2020-2021 Advancing Faculty Diversity Learning Community (AFD-LC)  
2020-2021 UC Davis PREP Mentor (Mentee: Connor Christiansen)  
2021 Featured in Cell Mentor, "[1000 Inspiring Black Scientists](#)."  
2020 Featured in UC Davis Magazine, "Communicating Science," Volume 38, No.1.  
2020 Featured in Scientific American, "Women in Science May Suffer Lasting Career Damage from COVID-19," Aug. 12, 2020. <https://www.scientificamerican.com/article/women-in-science-may-suffer-lasting-career-damage-from-covid-19/>.

- 2020 Featured in UC Davis College of Biological Sciences: Ongoing Injustices Against Black Americans (<https://biology.ucdavis.edu/news/professors-crystal-rogers-and-wilsaan-joiner-respond-ongoing-injustices-against-black>)
- 2020 Diversity and Science Symposium. UC Dan Diego. Virtual (October)
- 2020 Workshop Moderator: "Strategies to Lessen Biases in Science", SDB Annual Meeting (Virtual, July)
- 2020 UC Davis Faculty Panel for Undergraduate Research Summer Program, *Panelist*
- 2017-2019 CSUN Chapter Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Faculty Co-Mentor
- 2017-2019 CSUN Building Infrastructure Leading to Diversity (BUILD) Promoting Opportunities for Diversity in Education and Research (PODER) Mentor (Mentees: Nikolas Morrison-Welch, Jose Chacon, Sasha Machulsky)
- 2017, 2018 Culturally Competent Mentoring Workshop (CSUN)
- 2010-2014 Caltech Minority Undergraduate Research Fellow (MURF)/WAVE Mentor (Mentees: Karla Terrazas, Ryan Morrie, Renee Fleming)
- 2010 Caltech Freshman Summer Research Institute (FSRI) Mentor (Mentee: Jackie Phillips)

JOURNAL PEER REVIEW

2015- Present: Nature Cell Biology (2015), Developmental Biology (2017, 2020, 2021), Journal of Cell Biology (2015, 2020), WIREs Developmental Biology (2018), Mechanisms of Aging (2019), Development Growth and Differentiation (2020), Biochemical Journal (2021), Genesis (2021), Birth Defects Research (2022), PLOS ONE (2022), JOVE (2022), Seminars in Cell and Developmental Biology (2022), Current Opinion in Genetics and Development (2022), Genes (2023), PLOS Biology (2023), Journal of Cellular Physiology (2024), Current Opinions in Cell Biology (2024), Developmental Biology (2024), Nature Communications (2024)